BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C.

In the Matter of the Application of)
)
AMERICAN TELEPHONE AND TELEGRAPH COMPANY)
)
For a certificate under Section 214 of the)
Communications Act of 1934, as amended,)
that the present and future public conven-)
ience and necessity require the construction)
and operation of facilities between Point)
Reyes, California, and Koko Head, Oahu,)
Territory of Hawaii.)

APPLICATION

American Telephone and Telegraph Company, the applicant herein, respectfully represents and states as follows:

1. Applicant is a New York corporation, having its principal office at 195 Broadway, New York 7, New York. Correspondence concerning this application should be addressed to Mr. Frank A. Cowan, Assistant Director of Operations, Long Lines Department, American Telephone and Telegraph Company, 32 Avenue of the Americas, New York 13, New York.

2. Applicant is engaged in the business of furnishing interstate and foreign communication service and is a carrier subject to Section 214 of the Communications Act of 1934, as amended.

3. Applicant proposes to construct a submarine cable system between the continental United States and the Territory of Hawaii. This system will connect in the Hawaiian Islands with facilities provided by the Hawaiian Telephone Company and in the United States with the Bell System nationwide network. To effectuate this proposal, applicant requests authorization by the Commission to construct and operate the following facilities:

(a) Twin deep-sea submarine repeatered type cables to be located in the Pacific Ocean (except for short land portions at each end) between Point Reyes, California, and Koko Head, Oahu, Territory of Hawaii. The core of each cable will consist of a central copper conductor insulated with water-impervious material (polyethylene) and provided with a return conductor consisting of six thin copper tapes along the surface of the insulation. In the submarine portions, the core will be protected by armor of various types depending upon the depth of the water. The land portions, estimated to be about 1/4 mile at each end, will be shielded cable. The proposed general route of these cables will be about 2100 nautical miles in length and is shown on Exhibit 1, attached hereto and made a part hereof. Each cable will have a capacity of 36 one-way voice channels.

(b) Terminal equipment, consisting of three 12-channel broad-band carrier telephone terminals (modified Type L) and one 18-channel voice frequency carrier telegraph terminal (Type 43A-1) at each end.

The proposed facilities will provide 36 two-way telephone circuits, one of which will be used for the operation of 18 voice frequency carrier telegraph circuits.

4. It is contemplated that the proposed cable system will be owned, operated and maintained by applicant. However, the Hawaiian Telephone Company may acquire an interest in the ownership and operation of the System, subject to the approval of the Commission to be applied for at the appropriate time.

5. The proposed cable system will be used to supplement existing radio facilities of the applicant which, in conjunction with facilities provided by the Hawaiian Telephone Company, now furnish service between the continental United States and the Hawaiian Islands. It will be used to provide message telephone service and various private line services, including telephone and telegraph, which applicant now furnishes in the continental United States.

6. Long-distance message telephone service and private line channels for program transmission between the continental United States and the Hawaiian Islands are now furnished by 12 radio circuits provided by facilities of applicant in California, operating in conjunction with radio facilities provided by the Hawaiian Telephone Company on the Island of Oahu.

7. To meet the current normal demand of the general public for service between the continental United States and the Hawaiian Islands, the existing radio circuits are operating at substantially full capacity, leaving little margin to provide for future increase in such demand. The public demand for such service has been increasing rapidly and is expected to continue to do so as a result of the economic and industrial development of Hawaii and the defense activities centered there. In addition, applicant is informed that the military forces have substantial requirements for private line telephone, telegraph and facsimile circuits in cable between the Mainland and Hawaii, and that there are no existing cable facilities to meet these requirements. The estimated future circuit requirements to meet the public demand for service are as follows:

	1955 (Actual)	1960 (Est.)	1965 (Est.)
Long distance message telephone	12	24	29
Private line telephone	-	2	3
Private line telegraph	-	4	6

These figures do not include the estimated requirements of the military forces.

8. Although the transmission quality of the existing radio circuits is better than that on most radio routes, service between the continental United States and Hawaii is subject to interruption and impairment because of the effect of atmospheric disturbances on these radio circuits. In addition, the quality of the transmission suffers impairment as a result of these disturbances and general interference to which radio transmission is subject. From the military and defense viewpoint, the existing service has an added disadvantage. It is wholly dependent upon one type of transmission, i.e., radio, with no alternative method of communication, if the radio circuits are rendered unserviceable for any reason.

9. To provide the needed additional circuits and to improve the reliability and quality of service between the continental United States and Hawaii, applicant proposes, subject to approval by this Commission, to construct the submarine telephone cable system described in paragraph 3 hereof. In providing the needed additional circuits by submarine cable, applicant will substantially strengthen and improve the existing telephone communication system between the continental United States and Hawaii. The cable facilities will introduce diversification into the system and will make available high quality circuits which are not subject to the interruptions and impairments which radio circuits experience.

10. Rates for message telephone service and private line channels for program transmission handled over the proposed cable facilities will be in accordance with applicable tariffs filed with this Commission. Rates for other private line services handled over

these facilities will be in accordance with tariffs to be filed. Applicant's compensation for the use of the cable facilities will be on the basis of a division of the revenue which will be negotiated with the Hawaiian Telephone Company.

11. Applicant estimates that the cost of the proposed facilities will be about $35,000,000. A summary of the cost by plant accounts affected, quantities and cost of major items of material and amounts and cost of labor are shown in Exhibit 2, attached hereto and made a part hereof.

12. Concurrently with this application, applicant is filing with this Commission an application for a license authorizing applicant to land and operate the proposed cables at Point Reyes, California, and at Koko Head, Oahu, under the provisions of an Act entitled, "An Act relating to the landing and operation of submarine cables in the United States" (47 U. S. Code, Sections 34-39).

WHEREFORE, applicant respectfully prays that this Commission issue its certificate, pursuant to Section 214 of the Communications Act of 1934, as amended, that the present and future public convenience and necessity require the proposed construction and operation by applicant of the facilities described in paragraph 3 hereof.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

By (Signed) FRANK A. COWAN

Assistant Director of Operations,
Long Lines Department.

Dated August 9, 1955.

(Signed) CHARLES F. MARTIN

Attorney
32 Avenue of the Americas, New York 13, N.Y.

STATE OF NEW YORK)
) ss.:
COUNTY OF NEW YORK)

FRANK A. COWAN, being duly sworn, deposes and says that he is Assistant Director of Operations of the American Telephone and Telegraph Company (Long Lines Department); that he has read the foregoing application and knows the contents thereof; that the same is true to the best of his knowledge, information, and belief.

(Signed) FRANK A. COWAN

Subscribed in my presence
and sworn to before me by
the affiant, above named,
this 9th day of August
1955.

August J. Falcier

AUGUST J. FALCIER
Notary Public, State of New York
No. 41-6225100
Qualified in Queens County
Certificate filed in New York County
Commission Expires March 30, 1956

ESTIMATED COST DATA

ESTIMATED COST OF CONSTRUCTION BY CLASSES OF PLANT

Plant Accounts	"000" Omitted Gross Additions	"000" Omitted Net Additions
Outside Plant		
Buried cable	$ 20	$ 20
Submarine cable	24,120	24,120
Right of way	15	15
Total Outside Plant	$24,155	$24,155
Central Office Equipment		
Submarine cable repeaters	$ 8,760	$ 8,760
Power plant	1,200	1,200
Terminal equipment	950	950
Total Central Office Equipment	$10,910	$10,910
Total Outside Plant and Central Office Equipment	$35,065	$35,065

MAJOR ITEMS OF MATERIAL AND LABOR

	Estimated Material		Estimated Labor	
	Item	Costs Including Supply Expense	Hours	Costs Including Plant Superintendence, Tool Expense and Other Costs Associated with Labor
Buried cable	0.5 mi.	$ 10,000	1,100	$10,000
Submarine cable	4600 nautical mi.	18,200,000	*	*
Submarine cable repeaters and equalizers	158	7,697,000	*	*
Power plant	-	860,000	*	*
12-channel carrier telephone terminals and associated equipment	6	170,000	*	*
18-channel voice-frequency carrier telegraph terminals.	2	30,000	*	*

* Installation by contractors' labor.

Exhibit 2